

the opposite side thereof connectable to the coupling element of the guide tracks. Support for this amendment is shown in the Specification on page 3, lines 7 – 16.

Finally, subsection (c) has been amended by claiming the at least one insertion and at least one removal guide track as comprising a transfer point for transfer of the wagons between the circulating chain and the guide tracks. Support for this amendment is shown in the Specification on page 3, lines 7 – 11. The Applicant respectfully submits that no new matter is added.

I. Claim Rejections under 103 (a)

Claim 1 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Daniels (U.S. Patent No. 3,010,410) or Kierpaul et al. (U.S. Patent No. 5,934,444). Newly amended Claim 1 of the present invention claims a device for carrying out a sequence of working steps on travelling work station wagons comprising: a) an oval track wherein said work station wagons are circulating, wherein said wagons comprise at least one detachable connection element provided at one side of the wagons whereby the wagons are connected to a circulating chain which moves said wagons;

b) at least one insertion and at least one removal guide track which is provided on the outside of said oval track, comprising at least one coupling element, wherein said wagons further comprise at least one connecting element provided at the opposite side thereof connectable to the coupling element of the guide tracks;

c) said at least one insertion and at least one removal guide track comprises a transfer point for transfer of said wagons between said circulating chain and said guide tracks with at least one detachable element, with at least one switchable points element located on said guide track, which during the insertion position, release said at least one coupling element and bring about the engagement of said detachable connection element to said chain or during the removal position, couple the coupling elements and removably detach said at least one detachable connection from said chain.

The Examiner states that the carriers 30 of Daniels or 18 of Kierpaul, et al. could be called work station wagons because the name has no specific functions

assigned to it.

Daniels discloses or suggests a power driven track type conveyor comprising a rectangular track system with a wheeled conveying dolly 30. Daniels, however, does not disclose a work station wagon, but rather discloses a dolly. The dolly comprises not the presently claimed connecting elements, but discloses or suggests cleat members (Col. 4, lines 40 – 45) for connecting the dollies to the circulating chain. The Applicant respectfully submits that such cleat members are not connecting members since they only act in one direction. Furthermore, Daniels also does not disclose or suggest presently claimed coupling element at the insertion and removal guide track.

Therefore, Daniels discloses a railway track system with ordinary railway switch points for removal and insertion of the dollies from and into the circuit. The dollies of Daniels require flanged wheels whereas, in the presently claimed system, rail-independent work station wagons with “tired” wheels are used. Such wheels can be freely moved after being disconnected from the removal track guide. The presently claimed invention does not claim or require structures fixed to the floor such as Daniels’ rails or grooves for receiving the flanges of the wheels.

The Applicant respectfully submits that Daniels does not discuss or even remotely suggest the presently claimed invention. Accordingly, the Applicant respectfully submits that the claimed invention would not have been obvious to one of ordinary skill in the art at the time of the invention in view of Daniels.

Kierpaul, et al. discloses or suggests the transport of totes in an airport terminal using conveyors, vertical lifts, and manual transfer of totes. The transferring system of Kierpaul, et al. is designed to vertically move totes from one floor of a building to another. Kierpaul, et al. does not disclose the presently claimed work station wagons. In fact, Kierpaul, et al. discloses conveyors, which are moved by hanging on a single ceiling rail and not the presently claimed wagons running on the floor by means of wheels. Furthermore, in Kierpaul, et al., the connecting elements are not on one or both sides of the conveyors, but are located centrally on top. Additionally, no transfer point from a one sided connecting element to the opposite sided connecting element is disclosed or suggested. After removal of the conveyors from the single rail track, the conveyors are either stationary or must be put on the

conveyor belt.

Neither Daniels nor Kierpaul et al. discuss or even suggest the presently claimed invention of Claim 1. Accordingly, the Applicant respectfully submit that the claimed invention of Claim 1 would not have been obvious to one having ordinary skill in the art at the time of the invention over either Daniels or Kierpaul et al.

Claim 2 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Daniels or Kierpaul et al. in view of Stahl (U.S. Patent No. 2,789,683). Claim 2 claims the work station wagon device of Claim 1 with spacers in between the wagons. The Examiner indicates that the spacers of Stahl could be added to Daniels or Kierpaul, et al. The Applicant's arguments with respect to the rejection of Claim 1 over either Daniels or Kierpaul, et al. apply with equal force in the present rejection.

Stahl does not disclose or suggest the chain driven track nor wheel guided track, but rather an intricate system of cylindrical cam surface holders is used to control work stations. The work stations of Stahl are different than the presently claimed work station wagons. First, Stahl's work holders 3 differ from the presently claimed invention by not being removable from the circuit. Next, Stahl discloses lugs 31, which have no function in connection with insertion of wagons into the circuit. Accordingly, the Applicant respectfully submit that Claim 2 would not have been obvious to one having ordinary skill in the art at the time of the invention over Daniels or Kierpaul et al. in view of Stahl.

II. Claim Rejections under § 112

Claims 1-6 are rejected under 35 U.S.C. § 112 for being based on an inadequate disclosure. The Examiner questions the structural details of the removal/insertion of the wagons into the circulating oval track. The Examiner specifically asks, "how does switch 37, 37' know when there is an opening to supply a wagon into?" In the Specification, the Applicant indicates that the work station wagons are used in a manufacturing environment to facilitate the production of a known series of processing steps. Since these steps are repeated, the position of switch 37, which is the points tongues that controls the removal/insertion of wagons, can be programmed. Their position can also be manually operated as necessary to

adjust the manufacturing sequence. Other structural details and operations are known to those ordinarily skilled in the art.

The Examiner also questions the high speed drive, which inserts the wagons. The high speed drive is needed to move the inserted wagon into the transfer position quickly while there is still an open space. Once the inserted wagon is transferred to the oval track by the points tongues, the following wagon's spacer bumps it into place in the sequence of circulating wagons.

Again, the additional detail given above explaining the two tracks and the two control elements on different surfaces of the wagon body should clarify the issues raised by the Examiner. Accordingly, the Applicant respectfully submits that Claims 1 – 6 overcome the Examiner's rejection.

III. Drawing Objections under 37CFR 1.83(a)

The drawings are objected to under 37 CFR 1.83(a). The Examiner indicates that the load-dependent drive of Claim 4 must be shown or the feature(s) cancelled from the claim(s). The Applicant respectfully submits that the load dependent drive refers to the drive system of the insertion guide (track system).

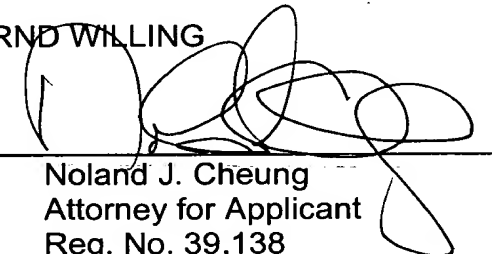
The Applicant respectfully submits that no new matter is added.

For any and all of the aforementioned reasons, reconsideration and early allowance of Claims 1-6 is courteously requested.

Respectfully submitted,

BERND WILLING

By


Noland J. Cheung
Attorney for Applicant
Reg. No. 39,138

Bayer Corporation
100 Bayer Road
Pittsburgh, Pennsylvania 15205-9741
(412) 777-2827
FACSIMILE PHONE NUMBER:
(412) 777-5449
s:\ks\NJC0684